

**U. S. DEPARTMENT OF ENERGY  
WORK BREAKDOWN STRUCTURE DICTIONARY  
PART II - ELEMENT DEFINITION**

<b>1. PROJECT TITLE/PARTICIPANT</b> Environmental Management/Bechtel Jacobs Company LLC		<b>2. DATE</b> 10/01/02	<b>3. IDENTIFICATION NUMBER</b> DE-AC05-98OR22700
<b>4. WBS ELEMENT CODE</b> 1.12.04.04.01.02		<b>5. WBS ELEMENT TITLE</b> Paducah Inactive Facilities D&D	
<b>6. INDEX LINE NO.</b> N/A	<b>7. REVISION NO. AND AUTHORIZATION</b> Rev 1		<b>8. DATE</b> 01/23/03
<b>9. APPROVED CHANGES</b> N/A			
<b>10. SYSTEM DESIGN DESCRIPTION</b> N/A		<b>11. BUDGET AND REPORTING NUMBER</b> N/A	
<p><b>12. ELEMENT TASK DESCRIPTION</b></p> <p><b>WBS GRAPHIC</b></p> <p style="margin-left: 40px;">See attached.</p> <p><b>INTRODUCTION</b></p> <p>The purpose of the D&amp;D project is to plan and implement the decontamination and/or demolition of the 15 Inactive Facilities and structures at the Paducah Gaseous Diffusion Plant. Specific activities will be undertaken to stabilize the structures; prepare regulatory documentation under the CERCLA Process; perform infrastructure (process equipment and material); perform structure demolition to the building slab levels, and backfill any basements or pits to prevent water accumulation and to alleviate potential safety concerns from open holes. The building slabs and any underlying soil or environmental media contamination resulting from the operation of the building will be addressed in the GDP D&amp;D program.</p> <p>For the inactive facilities, the Engineering Evaluation and Cost Analysis for the C-410 Feed Plant Complex Non-Time Critical Removal Action will be assumed to bound the activities for the inactive facilities. An Action Memorandum will be generated to document the planned activities at these facilities. Due to the relatively small size of these facilities, a one phase D&amp;D (both infrastructure and facility structure) D&amp;D will be performed for these facilities. Materials generated as a result of the D&amp;D will be dispositioned either through reuse or appropriate disposal mechanisms.</p> <p>Supporting these individual phases are subprojects Technical Management and Integration; Newly Generated Waste Management; and Support of DOE Primes, which cross cut the individual activities.</p> <p>The Building C-410 Feed Plant Complex WBS Element Structure is as follows:</p> <p>WBS 1.12.04.04.01.02. 01 Inactive Facilities Management &amp; Integration  WBS 1.12.04.04.01.02. 02 Inactive Facilities Site Evaluation  WBS 1.12.04.04.01.02.03 Inactive Facilities Infrastructure D&amp;D (Non-time critical removal action)  WBS 1.12.04.04.01.02.04 Inactive Facilities Facility Structure D&amp;D (Removal action)  WBS 1.12.04.04.01.02.06 Inactive Facilities Newly Generated Waste  WBS 1.12.04.04.01.02.07 Inactive Facilities DOE Prime Support  WBS 1.12.04.04.01.02.08 Inactive Facilities Capital Equipment  WBS 1.12.04.04.01.02.09 Inactive Facilities Removal Action Technical Support  WBS 1.12.04.04.01.02.10 Inactive Facilities Reuse and/or Recycle of Equipment</p> <p><b>LOGIC RELATIONSHIP</b></p> <p>Prior to any activity inside the building, a Facility Safety Authorization Basis must be in place. A Facility Description Document/Hazard Assessment Document (FDD/HAD) is being developed for the inactive facilities</p>			

<b>1. PROJECT TITLE/PARTICIPANT</b> Environmental Management/Bechtel Jacobs Company LLC	<b>2. DATE</b> 10/01/02	<b>3. IDENTIFICATION NUMBER</b> DE-AC05-98OR22700
<b>4. WBS ELEMENT CODE</b> 1.12.04.04.01.02	<b>5. WBS ELEMENT TITLE</b> Paducah Inactive Facilities D&D	

to determine level of authorization basis document required for the facilities. Based on FDD/HAD, appropriate SAB Documentation will be developed. An Action Memorandum for the D&D of the inactive facilities will be developed based alternatives considered for the C-410 Complex, which are presented in the Engineering Evaluation and Cost Analysis. Following approval by the regulatory agencies and DOE Signature of the AM, a Removal Action Work Plan will be completed to define the specific approach for the D&D of each inactive facility. The D&D of the facilities will be implemented according to the plans outlined in the RAWP, and all staged materials and process equipment, utilities, and ancillary equipment will be removed, packaged, and dispositioned according to the CERCLA Documentation. The facility structure will be demolished to grade, and debris generated from demolition will be dispositioned. The soils and environmental media impacted by the facility will be addressed following Facility Structure demolition by the GDP D&D program.

**RELEASE SITES**

Assessments to be completed:

C-204 Disintegrator Building	C-218 Firing Range
C-402 Lime House	C-403 Neutralization Pit
C-405 Contaminated Item Incinerator	C-410A Hydrogen Holder Tank
C-410-B Sludge Lagoon	C-603-A Nitrogen Manifold
C-603-B Nitrogen Storage Tank	C-603-C Nitrogen Receiver (North)
C-603-D Nitrogen Receiver (South)	C-603-H Nitrogen Generator Control House
C-603-I Nitrogen Generator Tower Area	C-611-M North Sanitary Water Storage Tank
C-611-N South Sanitary Water Storage Tank.	

Actions to be Completed

C-204 Disintegrator Building	C-218 Firing Range
C-402 Lime House	C-403 Neutralization Pit
C-405 Contaminated Item Incinerator	C-410A Hydrogen Holder Tank
C-410-B Sludge Lagoon	C-603-A Nitrogen Manifold
C-603-B Nitrogen Storage Tank	C-603-C Nitrogen Receiver (North)
C-603-D Nitrogen Receiver (South)	C-603-H Nitrogen Generator Control House
C-603-I Nitrogen Generator Tower Area	C-611-M North Sanitary Water Storage Tank
C-611-N South Sanitary Water Storage Tank.	

Past and Future Accomplishments

**PAST ACCOMPLISHMENTS**

? No Activities in this WBS Element to date. Surveillance and Maintenance of the Inactive Facilities was performed as a part of the Uranium Programs Project.

**FUTURE ACCOMPLISHMENTS**

? Prepare Action Memorandum (AM) for Inactive Facilities Decontamination and Decommissioning.

? Prepare Removal Action Work Plan (RAWP).

? Initiate Infrastructure and Facility Structure D&D

? Packaging and shipment for disposition of waste generated during Infrastructure D&D

? Complete Infrastructure and Facility Structure Removal

? Continue packaging and shipment for disposition of waste generated during Infrastructure D&D

? Complete Waste Disposition

<b>1. PROJECT TITLE/PARTICIPANT</b> Environmental Management/Bechtel Jacobs Company LLC	<b>2. DATE</b> 10/01/02	<b>3. IDENTIFICATION NUMBER</b> DE-AC05-98OR22700
<b>4. WBS ELEMENT CODE</b> 1.12.04.04.01.02	<b>5. WBS ELEMENT TITLE</b> Paducah Inactive Facilities D&D	
<b>SCOPE</b>		
1.12.04.04.01.02.01 TECHNICAL MANAGEMENT AND INTEGRATION		
<p>Technical Management and Integration activities include the technical, subcontract, and project management necessary to ensure that all activities in the WBS elements are completed on schedule, within budget, and without safety or environmental incident. Technical Management and Integration includes the Project Management oversight and Project Controls personnel who will perform project management, subcontractor oversight, ES&amp;H support, and project scheduling and estimating. Other BJC/M&amp;I support activities will be captured in individual WBS elements.</p> <p>The Life Cycle Baseline and Baseline Management activities will be performed on a routine basis.</p> <p>Baseline Change Proposals – Prepare BCP documentation to make necessary modifications to the baseline when scope, schedule, or cost changes are determined necessary.</p> <p>Specific activities include:</p> <ul style="list-style-type: none"><li>- Ensure completion of all activities within the subproject is in compliance with the principals of Integrated Safety Management</li><li>- Maintain contact and open communications with the appropriate DOE Project Manager on the subproject activities</li><li>- Participate in biweekly technical information and monthly Project Status Review meetings to provide the DOE with project status summaries</li><li>- Manage the subcontracts and work authorizations issued to complete the work under the subproject</li><li>- Respond and supply information to DOE for Lessons Learned, surveillance and audits, Site-Specific Advisory Board support, and other DOE reporting mechanisms.</li><li>- Maintain the monthly subproject estimates and estimates at completion.</li></ul>		
1.12.04.04.01.02.02 SITE EVALUATION		
<p>Due to relatively small size of these facilities, no Site Evaluation is planned.</p>		
1.12.04.04.01.02.03 INFRASTRUCTURE D&D		
<p>The AM for the Infrastructure and Facility Structure D&amp;D will be developed under this WBS Element. During the Infrastructure D&amp;D Phase, all process related and utility equipment and staged materials will be removed, staged, packaged for disposal, and shipped offsite for treatment or disposal in accordance with the AM and Removal Action Work Plan. Typical tasks include; drain, flush and remove process and infrastructure systems, ancillary hardware (interior and exterior to the structure). Remove non-load-bearing walls, perform preliminary characterization, and decontaminate areas above release criteria, conduct final characterization.</p>		
1.12.04.04.01.02.04 FACILITY STRUCTURE D&D		
<p>This element includes activities necessary to demolish the structure remaining after completion of the removal of process and chemical equipment is completed in the previous (Infrastructure D&amp;D) Phase. Buildings will be removed to the slabs and any holes, basement, etc. will be backfilled.</p>		
1.12.01.01.01.02.01 ENVIRONMENTAL MEDIA		
<p>Environmental Media will be addressed by the GDP D&amp;D program.</p>		

<b>1. PROJECT TITLE/PARTICIPANT</b> Environmental Management/Bechtel Jacobs Company LLC	<b>2. DATE</b> 10/01/02	<b>3. IDENTIFICATION NUMBER</b> DE-AC05-98OR22700
<b>4. WBS ELEMENT CODE</b> 1.12.04.04.01.02	<b>5. WBS ELEMENT TITLE</b> Paducah Inactive Facilities D&D	

1.12.04.04.01.02.06 NEWLY GENERATED WASTE

Activities in this WBS will involve in waste processing and waste disposal. These activities include establishing an area designated for processing and packaging of wastes generated during the Infrastructure removal; obtaining necessary materials and equipment for waste packaging; coordinating with onsite waste management subcontractor to place any hazardous or TSCA wastes in appropriate storage; and packaging and transfer of wastes for treatment and disposal.

1.12.04.04.01.02.07 DOE PRIME

Disposal cost for waste generated by this project will be developed and then transferred to the appropriate DOE Prime WBS.

1.12.04.04.01.02.07 CAPITAL EQUIPMENT

Obtaining waste handling and waste processing equipment.

1.12.04.04.01.02.08 REMOVAL ACTION TECHNICAL SUPPORT

This element includes activities required to plan and initiate the Infrastructure D&D (process and chemical equipment) removal and facility demolition for the inactive facilities. This activity will include preparation of the Removal Action Work Plan and submittal to the regulatory agencies; coordination of BJC Field Staff and PACE workers and supervision, and integration of field activities with support subcontractors including but not limited to Davis Bacon craft and Supervision; Field Engineering; Radiological Control Support; Waste Operations Subcontractor; and Nuclear Criticality Support Subcontractor, and management of generated wastes.

Updating training requirements for work force, including supervision and field staff, will be performed. Provide and equip office space for additional engineering resources necessary to accomplish equipment design and procurement. Complete development and obtain DOE approval (if necessary) of Safety Authorization Basis Perform annual review and revision of the SAB throughout the D&D of the Inactive Facilities.

1.12.04.04.01.02.09 REUSE AND/OR RECYCLE OF EQUIPMENT

This element includes the activities necessary to support disposition of equipment or materials from the Inactive Facilities through reuse or recycle. Scope will include necessary activities to identify material or equipment with potential for successful recycle or reuse; supporting necessary contractual activities for sale and or transfer of ownership; planning, designing, scheduling, and executing the removal of the equipment from the Complex; preparation for release and shipment of equipment, and packaging and shipment of materials or equipment consistent with reuse agreements.

**REQUIREMENTS/DRIVERS**  
Bechtel Jacobs Company LLC Contract DE-AC05-98OR22700, December 18, 1997  
Integrated Safety Management System Description, BJC/OR-87, Revision 1, April 1999  
As applicable, indicate other regulatory-related requirements.  
CERCLA: Y RCRA: N DNFSB: N DOE Orders: Y AEA: Y UMTRCA: N State: N Other: N

**WASTE VOLUMES**  
Please see attached waste performance metrics, as applicable  
The waste quantities supporting the method of accomplishment and basis of estimate are consistent with data reported on the Waste Performance Metrics Form.

<b>1. PROJECT TITLE/PARTICIPANT</b> Environmental Management/Bechtel Jacobs Company LLC	<b>2. DATE</b> 10/01/02	<b>3. IDENTIFICATION NUMBER</b> DE-AC05-98OR22700
<b>4. WBS ELEMENT CODE</b> 1.12.04.04.01.02	<b>5. WBS ELEMENT TITLE</b> Paducah Inactive Facilities D&D	
<b>PROJECT SCHEDULE</b> Please see attached project summary schedule and Milestone Status Summary Report.		
<b>EXECUTION YEAR BASELINE</b> Please see attached Budgeted Cost of Work Scheduled Plan.		
<b>BASELINE BY YEAR</b> .Please see attached Baseline by Year Report		